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GAIN Report

Global Agricultural Information Network

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Report Highlights:

With a significant improvement in MY 2010/11 rice production and MY 2011/12 wheat production forecast at record levels, government food grains stocks are expected to remain high on continued strong procurement. The Government of India (GOI) raised the off-take of rice and wheat from the government stocks through the public distribution system and private trade to keep domestic prices of rice and wheat under control during MY 2010/11. The GOI may continue to ban exports of wheat and non-basmati rice due to ongoing food price inflation and food security concerns. Record corn production will support higher corn exports in MY 2010/11. Despite record pulse production, MY 2010/11 imports are forecast at 3.5 million tons, slightly lower than the record imports of 3.75 million tons in MY 2009/10.

Commodities:

Wheat

Production:

India is set to harvest its fourth consecutive record wheat crop on record planting and favorable growing conditions. Post forecasts 2011 wheat production to increase to a record 83 million tons from 29.3 million hectares compared to 80.8 million tons from 28.2 million hectares in 2010. The government's preliminary 2010 wheat production estimate is slightly lower at 81.5 million tons, but is likely to be revised upward later in the season.

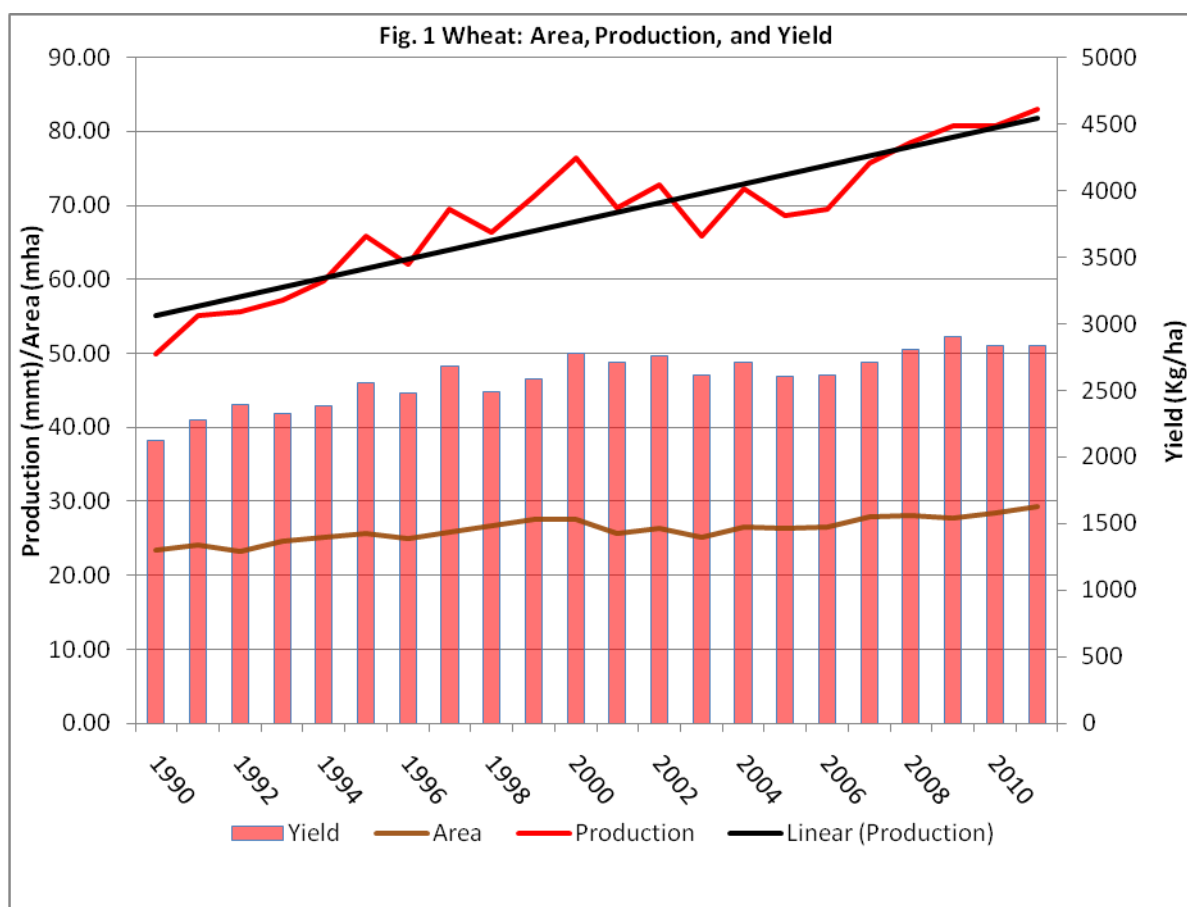
After a normal 2010 monsoon, good late season rains from September through November supported wheat planting prospects. Consequently, wheat sowing occurred under ideal soil moisture and temperature conditions, although there was a 2-3 week planting delay in some states. The timely announcement of the increase in the minimum support price (MSP) by the government of India (GOI) also encouraged farmers to plant wheat. Most of the area increase has been in the states of Uttar Pradesh, Rajasthan, Gujarat and Maharashtra, where the late season rains encouraged farmers to shift area out of coarse cereals to wheat. The GOI's National Food Security Mission's (NFSM) focus on increasing wheat production may also have had a positive impact on wheat planting.

About 91 percent of India's wheat crop is irrigated, but winter rains and cool temperatures are critical for realizing higher yields in most of the growing areas. The wheat growing areas received about 20 percent higher than normal rains during October-December providing optimal soil moisture conditions. Growing conditions so far have been favorable with cool temperatures and well distributed rains, but a rise in temperature and hailstorms around the harvest time (late March/early April) could adversely impact the overall crop yield and quality. There has been no report of any major damage due to pest and disease incidence, or weather aberrations. However, the delay in planting in some states may expose the crop to higher temperatures at the time of maturity and harvest. Consequently, Post does not anticipate any significant increase in the crop yield over the last year's yield of 2,833 kg per hectare average.

Indian wheat is largely a soft/medium hard, medium protein, white bread wheat, somewhat similar to U.S. hard white wheat. Wheat grown in central and western India is typically hard, with high protein and high gluten strength. India also produces around 1.2 million tons of durum wheat, mostly in the state of Madhya Pradesh. Most Indian durum is not marketed separately although some is purchased by the private trade at a small premium. Farmers are increasingly shifting from durum wheat to higher yielding non-durum varieties as the durum yield is significantly lower than regular wheat and does not command a significant price premium.

Production Up, But Concerns on Stagnating Yields, Climate Change and Ug99

Buoyed by four consecutive bumper crops, India's wheat production is back on the trend line after tottering below it during most of this decade (Fig. 1). However, wheat yields have remained relatively stagnant, with large variation in wheat yield from one region to other. Wheat yields in the largely irrigated, traditional growing areas of the north (Punjab, Haryana and Western Uttar Pradesh) are above 4.0 metric tons per hectare while yields in central and western states are comparatively very low (around 2.0 metric tons per hectare). While potential exists to increase wheat yields in these states, realizing that potential is hampered by insufficient irrigation facilities, poor seed replacement rate, and low input use. Most of the commonly sown wheat varieties were released nearly a decade ago and are showing signs of fatigue. New varieties with higher yield potential and better grain qualities developed by the local wheat research institutes and agricultural universities in recent years have failed to make sufficient inroads due to limited seed multiplication, distribution and extension facilities. Although Indian scientists acknowledge that biotechnology can be a valuable tool, current biotechnology applications are limited to gene pyramiding and experimental marker-assisted breeding for biotic, abiotic and quality traits.



Source; Ministry of Agriculture and FAS New Delhi estimates for 2011/12

The growth of wheat production following the Green Revolution has slowed down in the last decade (2000) causing concern for India's future food security. This has prompted the GOI to refocus on increased production of food grains. In 2007, the GOI launched a National Food Security Mission (NFSM) (<http://nfsm.gov.in/>) which aims to increase the country's wheat, rice, and pulse production by 8, 10 and 2 million tons respectively by the end of the 11th Five Year Plan (2011/12) to ensure food security. Since a further significant growth in area is unlikely due to inadequate irrigation resources and competition from other crops, the NFSM seeks to bridge the yield gap through dissemination of improved technologies and farm management practices.

There is a growing concern about the vulnerability of India's wheat crop to changing climatic conditions, particularly the earlier-than-normal rise in surface temperatures at the grain filling stage (March). The Indian Council of Agricultural Research (ICAR), India's apex agricultural research agency, reported that there can be 3 to 4 percent decrease in grain yield with 1°C increase in temperature during the grain filling stage. Of the 29 million hectares under wheat in India, about 9-10 million hectares are prone to terminal heat stress. Climate change is a serious threat to India's food security, and GOI researchers are working to develop a response mechanism and appropriate technologies to mitigate the risk, it will be a challenging task to meet the requirements of a vast country characterized by varying agro-climatic zones and production system.

A major concern for the Indian wheat crop in the near future is the threat from the Ug99 strain of wheat rust. Although Indian agricultural scientists assert that the agro-climatic conditions in the major wheat belt of north India are not conducive to the spread of Ug99, but the highly mutative nature of the Ug99 strain could make Indian wheat vulnerable to this rust, as more than three-fourths of the wheat varieties planted in India are highly susceptible to Ug99. The ICAR is continuously surveying and monitoring the wheat crop for Ug99, and also screening newly released wheat varieties in the country as well

as varieties in the pipeline against the Ug99 stem rust. Most of the local varieties, such as PBW 343, PBW 502 and HD 2687, are susceptible to Ug99. The government has been encouraging replacing the susceptible varieties with Ug99 resistant varieties like DBW 17, PBW 550, and HW 542.

Consumption:

Wheat consumption in MY 2011/12 is forecast to increase to 84.5 million tons on expected bumper wheat production and higher supplies of government wheat stocks at subsidized prices on continued government concerns regarding food inflation and food security to the poor. Wheat consumption in MY 2010/11 is estimated at 82.4 million tons, nearly six percent higher than last year, due to higher supplies of wheat from the government stocks to contain food price inflation. Concerns about continued unabated food inflation (see IN1018 and IN1109), forced the government to supply additional quantities of wheat and rice to the state governments for the Public Distribution System (PDS) at subsidized prices (albeit higher than PDS issue prices). In January 2011, the government announced an additional allocation of 5.0 million tons of food grains (2.13 million tons wheat and balance rice) to the state government for distribution through the PDS during January-June 2011. The GOI also made wheat available to bulk users and private traders at cost-plus-prices through an open market sale program, but the off-take has been limited as government wheat sale prices under this program are not significantly lower than the open market prices, and sales process is considered highly bureaucratic and cumbersome by the private trade.

Wheat consumption in India is mostly in the form of homemade *chapattis* or *rotis* (unleavened flat bread), using custom milled *atta* (whole wheat flour), and some wheat is used for various wheat based processed products like bread, biscuits and other bakery items. In the cities and urban centers, use of branded and packaged wheat *atta* marketed by large food companies is gaining market share. There are about 1,000 medium-to-large flourmills in India, with a milling capacity of around 24 million tons, which manufacture mostly *maida* (flour), semolina, and residual flour to cater to institutional demand. However, the average capacity utilizations by these mills is only around 50-55 percent processing and about 10-12 million tons wheat every year. The balance of production, after retention for seed/feed by farmers, is custom milled mostly in the *chakkies* (small flour mills). Typically, whole wheat is distributed through the public distribution system to be subsequently custom milled by the consumers for home use.

Recent surveys of the National Sample Survey Organization's reveal that per capita consumption of wheat at household levels has been relatively flat since early 2000. With the Indian economy growing steady and the middle class expanding, Indian household are diversifying their consumption pattern with the inclusion of other high value and protein items like fruits, dairy products, meat and processed foods in the consumption basket.

Government's Food Subsidy Bill Mounts

While the government policies relating to the MSP for essential agricultural crops and the price for the PDS purchases served the twin objectives of providing remunerative prices to farmers and affordable prices to poor consumers, the spread between the government's economic cost and the issue price of wheat and rice has widened leading to a surge in the food subsidy in recent years.

Table 1: Government's Wheat Procurement and PDS Operation

Marketing Year	MSP	Production	GOI Procurement	GOI Economic Cost	Off take from GOI Stocks	PDS Issue Price			Food Subsidy
(Apr – Mar)	Rs. per ton	(Million Tons)	(Million Tons)	Rs. Per ton	(Million Tons)	Rs. per ton			Rs. Billion
						APL	BPL	AAY	
2005/06	6,400	68.64	14.8 (21.6)	10,419	16.71	6,100	4,150	2,000	230.80
2006/07	7,000	69.35	9.2 (13.3)	11,778	11.88	6,100	4,150	2,000	240.10
2007/08	8,500	75.81	11.1 (14.6)	13,118	12.25	6,100	4,150	2,000	312.60
2008/09	10,000	78.57	22.7 (28.9)	13,844	14.89	6,100	4,150	2,000	436.68
2009/10	10,800	80.68	25.4 (31.5)	14,573	22.38	2/ 6,100	4,150	2,000	582.42
2010/11	11,000	80.80	22.5 (27.8)	1/15,439	24.10	6,100	4,150	2,000	1/555.78

2011/12	11,200	83.00	25.5 (30.7)	na	na	6,100	4,150	2,000	na
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Source: Ministry of Agriculture and Food Corporation of India

Notes: 1/Budgeted, Actual expected to be higher.

Current exchange rate is Rs. 45 = US\$ 1

PDS = Public Distribution System; APL = Above Poverty Line; BPL = Below Poverty Line; and AAY = *Antyodaya Anna Yojana* (Poorest of the Poor)

The government sales price of wheat under PDS programs has been unchanged since July 2002, while the support price paid to farmers has jumped by over 75 percent in the past seven years which has raised the government's cost price to Rs. 15,500 (\$345) per ton in 2010/11. Rising procurement costs without an increase in sales prices is pushing up the GOI's food subsidy spending, which reached Rs. 583 billion (\$13.0 billion) in Indian Fiscal Year (IFY) 2009/10, and is expected to increase further in IFY 2010/11 due to the larger off-take under PDS, higher storage costs and the GOI support price.

The Food Corporation of India (FCI) and state governments are facing a shortage of storage capacity due to substantial procurement of food grains since 2008/09, particularly in the major procuring States of Punjab and Haryana. With FCI's current covered storage capacity estimated around 28.0 million tons, large quantities of wheat have been kept open under Covered and Plinth (CAP) storage. Storage under these conditions results in significant indirect costs including quality deterioration and pilferage.

Central government leadership has embarked upon enacting an ambitious National Food Security Act (NFSA) that will provide a statutory framework for entitling certain minimum quantities of food supplies to specified beneficiary families at subsidized prices by the government. Recently, the government's National Advisory Council (NAC) has recommended to the government that the proposed act should cover about 90 percent of the total population. Under this proposed act all families living below poverty line will receive 35 kg food grains (rice and wheat) per month at nominal prices (wheat at Rs. 2/kg and rice at Rs. 3/kg), and the families above poverty line will receive 20kg every month at a price not exceeding 50 percent of the MSP. However, an expert panel set up by the government has suggested that the legal entitlement should be limited only to the population living below the poverty line. Experts report that if the NAC recommendations become law, the government faces the mammoth challenge of doubling current grain procurement, storage capacities, distribution and food subsidy levels. While a section of the ruling government seems to be pushing for an early implementation of the proposed law, it may take some time for the government to give a final shape to the NFSA, get parliamentary approval and eventually implement.

Market Price Steady on Sufficient Supplies

The domestic market is largely insulated from the global price movement as exports of wheat have been banned since 2007. Market prices during MY 2010/11 have eased down (see Table 3) due to additional wheat supplies from the government stocks during the second half of calendar year 2010. With the expectation of a record crop, current wheat prices are approximately at Rs. 12,500-13,500 (\$280-300) per metric ton. Despite the recent flare-up of global wheat prices, market prices during the MY 2011/12 are expected to remain steady in a narrow range on sufficient domestic supplies and expected continuation of the export ban.

Trade:

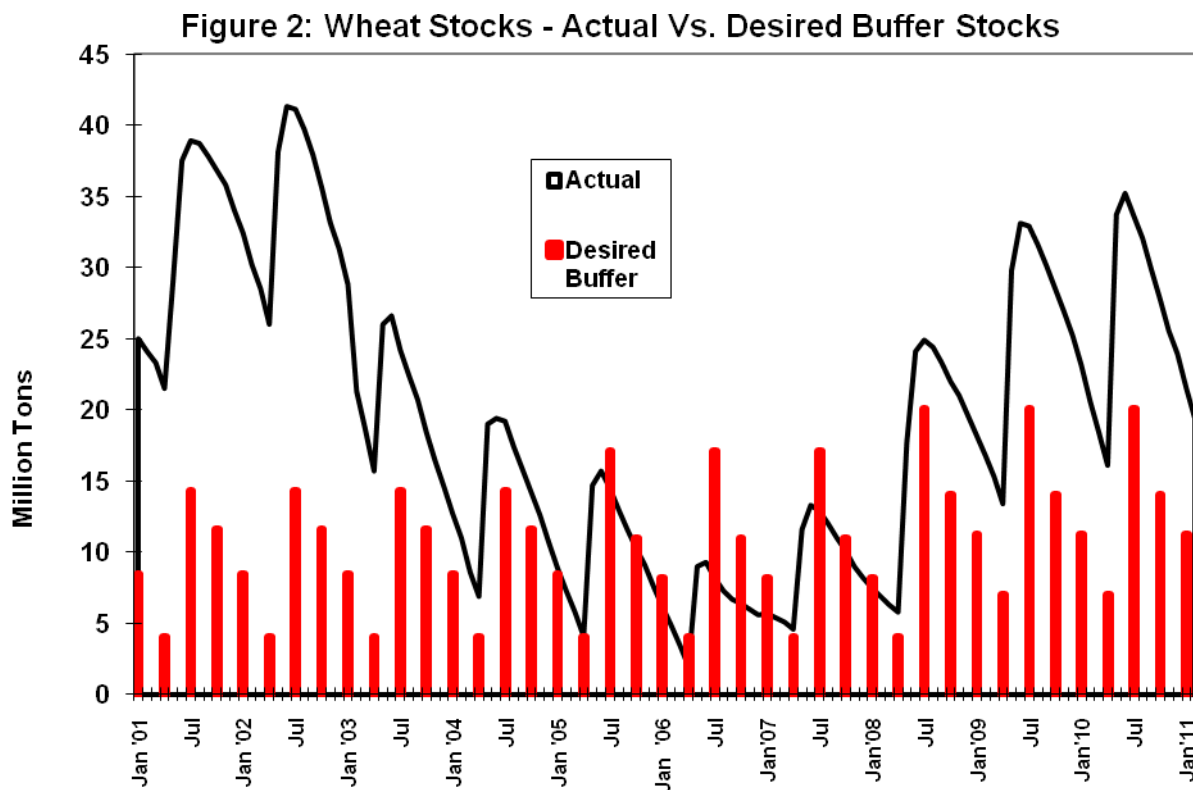
With the expected continuation of the export ban, wheat exports in MY 2011/12 are estimated at 300,000 tons, mostly limited to exports to neighboring countries like Nepal and Bangladesh as allowed by the government on humanitarian grounds. Despite forecasted record production, strong government procurement and abnormally high stocks, the government is unlikely to lift the ban on wheat exports due to continued food inflation concerns. According to trade sources, Indian wheat can find buyers at current global wheat prices as the F.O.B. price of Indian wheat would work out around \$350 per ton. Higher than anticipated government procurement and inadequate availability of storage space in the major surplus states of Punjab and Haryana could force the government to export wheat, if global wheat prices remain strong.

Industry sources report no export sales in MY 2010/11 despite the government allowing exports of 50,000 tons of wheat to Nepal (February 2010) and 200,000 metric tons to Bangladesh (August 2010) from the government stocks at cost price. With the economic cost of wheat procured by the government at Rs. 15-16,000 (\$330-340), exports were expensive after accounting for transporting and fobbing charges. With international wheat prices firming up, trade sources expect the Bangladesh government may explore prospects for sourcing wheat from India, but the actual shipment will spillover in the MY 2011/12. Although the GOI established an export quota of 650,000 tons for wheat products (not whole grain wheat) in MY 2010/11, exports have been negligible due to high domestic wheat prices and quality issues.

Due to relatively high domestic prices and the zero import duty policy, India imported small quantities of wheat in MY 2009/10 and MY 2010/11, mostly by southern millers in container shipments. Although the official trade estimates for MY 2010/11 are not available, trade sources report that south Indian millers imported about 250,000 metric tons in MY 2010/11, mainly from Australia and CIS countries. With the international wheat prices firming up and domestic pricing easing (see Table3), imports have come to a halt since November 2010. Opportunities for any imports of wheat into India in MY 2011/12 are precluded due to forecasted sufficient domestic supplies and expected strong international prices

Stocks:

Government-held wheat stocks on April 1, 2011, are forecast lower at 14.65 million tons compared with 16.13 million tons on April 1, 2010 due to higher domestic off take under various PDS and open market sales programs. Nevertheless, MY 2010/11 ending stocks are more than double the government's desired stocks of 7 million tons (4.0 million tons buffer and 3.0 million tons of strategic reserve). With government wheat procurement likely higher at 25.5 million tons on record production and a good support price, government wheat stocks could swell to around 36.6 million tons, higher than June 1, 2010 stocks of 35.2 million tons. MY 2011/12 ending stocks are forecast lower at 12.7 million tons on expected higher off-take of government wheat stocks under the PDS and open market sales. Estimates of privately-held wheat stocks are not available, but are expected to be minimal. The PS&D table does not include privately-held stocks.



Source: The Food Corporation of India.

Policy:

The Government of India (GOI) supports research, development and extension activities for transfer of new varieties and improved production technologies (seed, implements, pest management) to farmers. ICAR conducts wheat research and development at the national level, which is complemented by state agricultural universities, regional research institutions, and state agricultural extension agencies at the regional and state levels. The central and state governments also support farmers by subsidizing input supplies and agricultural credit at affordable prices. Several targeted programs like NFSM, the Integrated Cereals Development Program, the National Agriculture Development Program (*Rashtriya Krishi Vikas Yojana*) and the recently launched “Bringing the Green Revolution to Eastern India” are being implemented by GOI through the state governments.

The GOI establishes a minimum support price (MSP) for wheat on the basis of recommendations by the Commission for Agricultural Costs and Prices (CACP). Government parastatals like the Food Corporation of India (FCI) and various state marketing agencies have the mandate to procure wheat at the MSP for central government stocks. Subsequently, the government allocates wheat for distribution through the public distribution system and welfare schemes at a subsidized price. In years of surplus procurement and stocks, the government sells wheat in the open market to private trade at market price.

Since 2007, the GOI has permitted states to impose stock limits on the private trade of wheat under the Essential Commodities Act. Since 2008, the government has been seeking large food companies and trading companies operating in India to declare their stock levels. The government revoked the ban on futures trading in May 2009, which was imposed in February 2007.

Export of wheat and wheat products continues to be effectively banned since February 2007, with some exceptions. The Government has permitted an export quota of 650,000 metric tons of wheat products (not whole grain wheat) during a marketing year, and also occasionally allowed exports of wheat to Nepal and Bangladesh as specified on humanitarian grounds. Wheat imports by the government and private trade currently attract a zero import duty. Domestic wheat shortages and higher prices forced the government to lower the duty on wheat imports to zero in September 2006 for a short period and was subsequently extended indefinitely in October 2007.

Marketing:

The rapidly growing fast food industry and modernizing wheat-based food industry generate demand for specialty flours (used in pizzas and burger buns) that require varieties of wheat that India does not currently grow.

Despite numerous discussions at technical and policy levels, U.S. wheat continues to be denied market access to India. The GOI's phytosanitary requirement pertaining to the 31 specified quarantine weed seeds (wheat sample drawn from a single consignment not to contain more than 100 quarantine seeds per 200 kg sample) has effectively banned U.S. wheat shipments to India.

Production, Supply and Demand Data Statistics:

Table 2: Commodity, Wheat, PSD

(Area in Thousand Hectares, Quantity in Thousand Metric Tons)

Wheat India	2009/2010		2010/2011		2011/2012	
	Market Year Begin: Apr 2009		Market Year Begin: Apr 2010		Market Year Begin: Apr 2011	
	USDA	New	USDA	New	USDA	New

	Official	Post	Official	Post	Official	Post
Area Harvested	27,900	27,750	28,700	28,520		29,300
Beginning Stocks	13,430	13,430	16,100	16,125		14,650
Production	80,680	80,680	80,710	80,800		83,000
MY Imports	291	165	300	250		0
TY Imports	291	211	300	200		0
TY Imp. from U.S.	0	0	0	0		0
Total Supply	94,401	94,275	97,110	97,175		97,650
MY Exports	100	0	200	0		300
TY Exports	100	0	200	0		300
Feed and Residual	100	100	100	150		150
FSI Consumption	78,101	78,050	82,335	82,375		84,500
Total Consumption	78,201	78,150	82,435	82,525		84,650
Ending Stocks	16,100	16,125	14,475	14,650		12,700
Total Distribution	94,401	94,275	97,110	97,175		97,650

Table 3: Commodity, Wheat, Prices Table

Prices In	Rupees	per uom	metric tons
Year	2009	2010	%Change
Jan	11800	13600	15.3
Feb	11900	14300	20.2
Mar	11650	13500	15.9
Apr	10850	12250	12.9
May	10950	11500	5.0
Jun	11000	12300	11.8
Jul	11050	12250	10.9
Aug	11250	12350	9.8
Sep	12250	12300	0.4
Oct	13300	12300	-7.5
Nov	14000	12600	-10.0
Dec	13650	13200	-3.3
Exchange Rate	45.00	Local Currency/US\$	
Date of Quote	February 23, 2011	MM/DD/YYYY	
Month-end Delhi Wholesale Prices for Common Wheat			
Source: Department of Consumer Affairs, GOI			

Commodities:

Rice, Milled

Production:

Assuming normal weather conditions, including normal 2011 monsoon (June-September) rains, India's MY 2011/12 rice production is forecast higher at 98 million tons from 44.5 million hectares compared to MY 2010/11 production of 94 million tons. Relatively firm rice prices during MY 2010/11 coupled with the GOI's continued emphasis on rice production through the National Food Security Mission, focus on expanding the gains of the Green Revolution in the rice growing

regions of Eastern India, and increasing, (but still limited), adoption of hybrid rice cultivation, intensification techniques and other modern production techniques will support higher production provided 2011 monsoon rains are timely and normal in quantum and distribution.

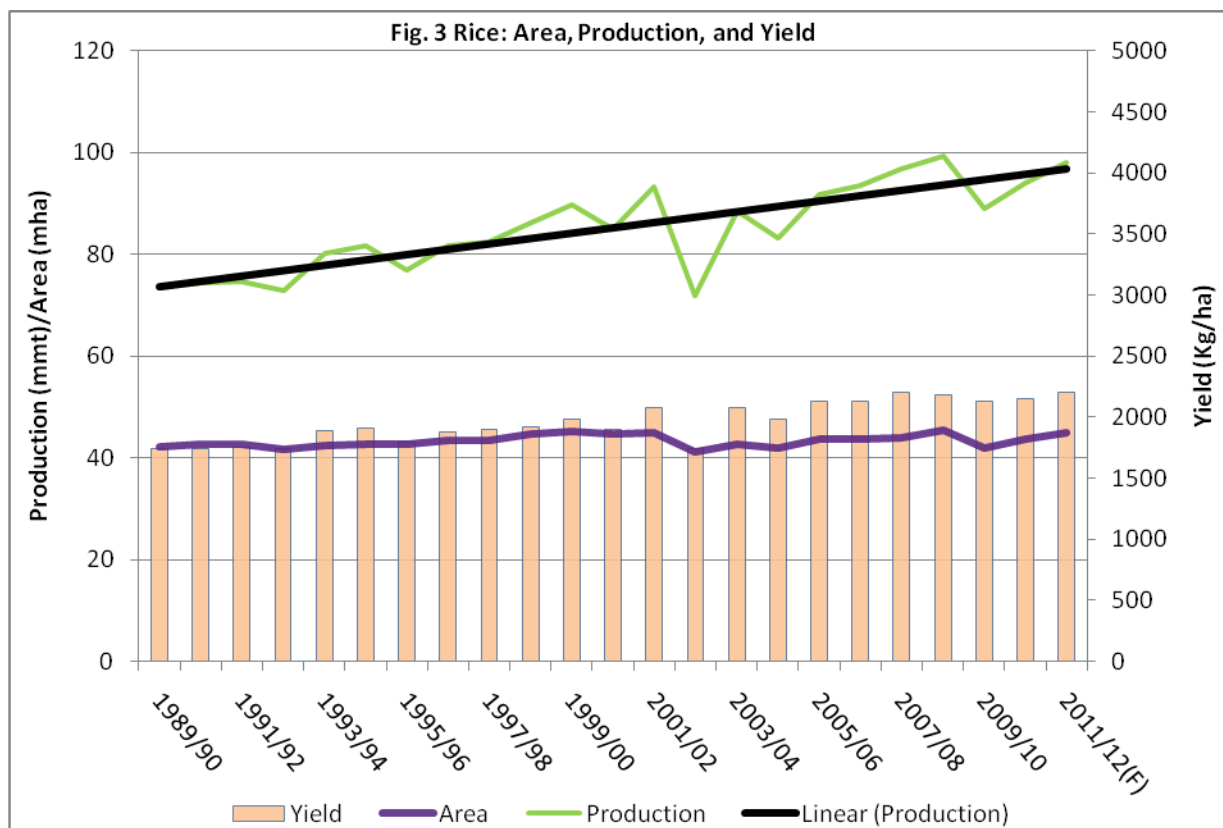
Post's MY 2010/11 production has been revised lower to 94.5 million tons on higher than earlier anticipated crop loss due to heavy late season rains and a cyclone in Andhra Pradesh and adjoining areas in September/October at the time of harvest. Earlier, the *kharif* (fall/early winter harvested) rice crop in the major rice belt of eastern India was adversely impacted by insufficient rains and drought like conditions during the planting stage (June-August). Losses would have been higher but for excellent rains and planting conditions in other parts of the country, and excellent late season rains across the country. Although the area planted to *rabi* (winter planted, spring harvested) rice is provisionally estimated lower compared to last year, sufficient late monsoon rains coupled with favorable growing conditions should result in a good harvest, estimated at 14.0 million tons. The government's recently released second advance estimate also place MY 2010/11 rice production at 94 million tons (80.16 million tons *kharif* and 13.84 million tons *rabi*), about 4.9 million tons higher than the revised MY 2009/10 drought impacted crop of 89.1 million tons.

Rice is one of the most important food crops of India contributing to more than 40 percent of total food grains production in the country. The major rice growing states are West Bengal, Uttar Pradesh, Andhra Pradesh, Punjab, Tamil Nadu, Orissa, Bihar & Chhattisgarh, which together contribute about 72% of the total area and 76 % of the total production in the country. The rice crop is typically planted after the onset of monsoon in June as the crop is largely rain fed, except in the major rice surplus states of Punjab, Haryana, Uttar Pradesh and Andhra Pradesh where a significant share of the crop is planted under irrigated conditions. Use of high-yielding seed varieties is largely confined to the states that use irrigation. Fertilizer application at the national level is not high, but is near optimum in these states.

India's long grain basmati rice production is growing after the introduction of the PUSA 1121 variety, an evolved high yielding variety of basmati rice, grown mostly in Punjab, Haryana and Western Uttar Pradesh. Although no official figures are available, industry sources report basmati rice production in MY 2010/11 at around 4.0 million tons from 1.6 million hectares, about 10 percent higher than last year in response to higher price realization vis-a-vis the MSP for common rice varieties last year.

Rice Production Upward with Wide Fluctuations

Although rice production has shown a steady upward trend, production is subject to wide year-to-year fluctuations as a significant portion of the crop is non-irrigated (around 58 percent of Indian rice is irrigated). Rice production had shown steady growth above the trend line during 2004/05 to 2008/09, largely due to good monsoon precipitation supporting a higher area and productivity (Fig.3). Despite uneven distribution of the 2010 monsoon rains, production has returned to the trend line after the dip in 2009/10 due to the poor monsoon. Experts believe that the rice growing area reached a plateau of 45 million hectares, and the only way to expand production to meet the growing demand is to improve productivity. However, some scientists are apprehensive that current Indian rice production techniques cannot sustain the growing domestic population. Indian rice production also faces the challenge of climate change as reflected by aberrations in the monsoon rain pattern in the last two years.



Source: Ministry of Agriculture and FAS New Delhi estimates for 2010/11 and 2011/12

Indian rice yields are below the world average, implying there is potential for increased production. There is wide variation in the levels of rice productivity among the major producing states in the country, and immense scope for increasing productivity by expanding assured irrigation facilities in many states. The government is also focusing on developing appropriate technologies to take enhance rice productivity under rainfed conditions. In the last Union Budget (2010/11), the government proposed to extend the benefits of the Green Revolution and other improved technologies to the eastern region of the country comprising Bihar, Chhattisgarh, Jharkhand, eastern Uttar Pradesh, West Bengal, and Orissa.

Area under hybrid rice, developed mostly by private seed companies, is estimated at 1.2 million hectares in 2010/11, and is concentrated mostly in eastern Uttar Pradesh, Bihar, Jharkhand, and Chhattisgarh. There are about 43 varieties of hybrid rice but the major challenge facing hybrid rice seed producers in India is the inability to cater to the vast diversity in consumer preference for rice, insufficient incremental yields, and higher irrigation and chemical input use requirements over traditional varieties. Nevertheless, hybrid seed varieties are reportedly under development both by government research institutes and by private companies, which should accelerate hybrid rice adoption by Indian farmers. The National Food Security Mission has set a target to cover 3 million hectares of rice area under hybrid rice by the year 2011-12 in order to achieve the objective of increasing rice production by 10 million. Efforts are underway to develop transgenic rice varieties and hybrids to incorporate resistance to various pests and diseases. However, this research is being done mostly by private seed companies. Approvals and commercialization of transgenic rice is still years away.

Consumption:

Rice is the major staple food for about 65 per cent of the country's population, and thus an important pillar for food security of India. More than 4,000 varieties of rice are grown in India to meet the varied consumer preferences.

Rice consumption in MY 2011/12 is forecast to increase to 96 million tons on forecasted sufficient domestic supplies and expected higher off-take of rice from government stocks. Due to relatively tight domestic supplies and consequent higher market prices in MY 2009/10, the government released additional rice from its stocks for distribution through the PDS at subsidized prices and also allowed higher open market sales to private trade. With market prices easing, rice consumption in MY 2010/11 is estimated to increase to 91 million tons compared to 85.8 million tons in MY 2009/10.

Steady Government Procurement/Disbursement

Rice is classified into two categories for government procurement operations: Common (length to breadth ratio less than 2.5) and Grade A (length to breadth ratio more than 2.5). Historically, most government-procured rice came from millers who were mandatorily required to sell the government a portion of their milled rice (ranging from 75 percent in Punjab and Haryana to 50 percent in Andhra Pradesh, and even lower in marginal surplus states) at pre-established rates, called the “levy price,” which is linked to the support price of paddy and milling costs. However in the recent years, most of the procurement by the government has been in the form of paddy bought at the support price, which is subsequently custom milled by the government before storage and distribution.

Due to concerns on the impact of raising the MSP on open market prices, the GOI did not increase the MSP for paddy for MY 2010/11, which was Rs.10,000 (\$222) per ton for Common varieties and Rs. 10,300 (\$230) per ton for Grade A varieties. As in the case of wheat, the government has not increased the sales price of rice distributed through the PDS since July 1, 2002, while the support price was increased by around over 75 percent over the last six years, further contributing to the GOI’s increasing food subsidy budget.

Table 4: Government’s Rice Procurement and PDS Operation

Marketing Year	MSP for Paddy (Unmilled Rice Common variety)	Production	GOI Procurement	GOI Economic Cost	Off take from GOI Stocks	PDS Issue Price		
(Oct-Sept)	Rs. per ton	(Million Tons)	(Million Tons)	Rs. Per ton	(Million Tons)	Rs. per ton		
						APL	BPL	AAV
2005/06	5,700	91.79	27.58 (30.0)	13,397	na	7,950	5,650	2,000
2006/07	6,200	93.35	25.11 (26.9)	13,912	na	7,950	4,150	2,000
2007/08	7,450	96.69	28.74 (29.7)	15,499	na	7,950	4,150	2,000
2008/09	9,000	99.18	34.10 (34.4)	17,325	25.69	7,950	4,150	2,000
2009/10	10,000	89.09	32.03 (36.0)	18,736	28.35	7,950	4,150	2,000
2010/11	10,000	94.00	31.0 (33.0)	20,431	na	7,950	4,150	2,000

Source: Ministry of Agriculture and Food Corporation of India

Notes: Current exchange rate is Rs. 45 = US\$ 1

PDS = Public Distribution System; APL = Above Poverty Line; BPL = Below Poverty Line; and AAY = *Antyodaya Anna Yojana* (Poorest of the Poor)

Government domestic rice procurement in MY 2010/11 through February 10, 2011, is slightly behind last year at 20.6 million tons compared to 20.95 million tons last year during the same period. Total MY 2010/11 procurement is estimated to reach over 31 million tons, nearly one third of the total, compared with 32 million tons in MY 2009/10.

Prices Steady on Higher Government Sales

Rice prices in the domestic market have eased in MY 2010/11 (see Table 6) due to the improved domestic production and higher off-take of government rice stocks due to food inflation concerns. Like wheat, domestic market prices are largely insulated from the global price movements as exports of non-basmati rice continue to remain banned. Although exports of basmati rice and some select premium rice varieties are allowed, exports volumes are not large enough to impact domestic market prices. With sufficient domestic production, relatively large government stocks and government continued concerns on food price inflation, market prices during the remaining MY 2010/11 are expected to remain steady.

Trade:

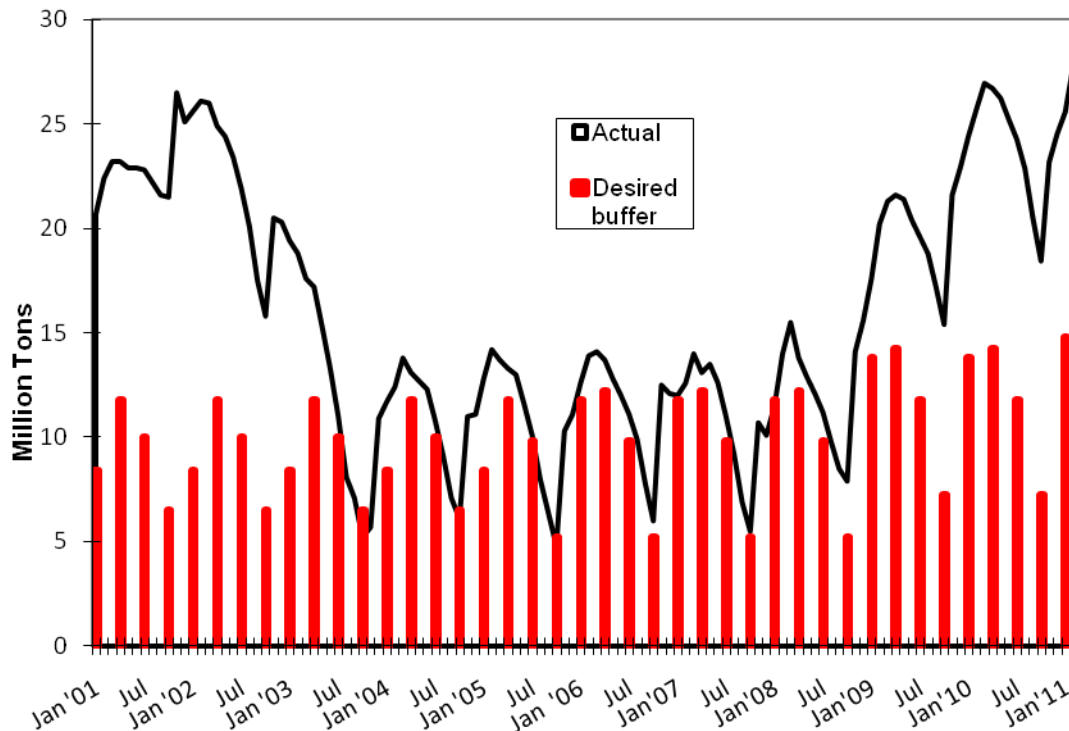
With the government unlikely to remove the blanket ban on exports of non-basmati rice in the near future, MY 2010/11 rice exports are likely to reach 2.4 million tons, which consists of basmati rice (2.0 million tons) and non-basmati rice (0.4 million tons). Recently, the GOI allowed exports of 150,000 metric tons of select premium varieties of non-basmati rice. It also relaxed the conditions for exports of 300,000 metric tons of non-basmati rice to Bangladesh at cost. With the high cost of government rice stocks (\$480-490 per ton), exports were not possible despite serious efforts by the two governments. Recently, the GOI issued a notification removing the cost requirement and allowing exports at a concessional price. While the two governments are yet arrive at a decision on pricing and a delivery schedule, trade source believe that India will be able to ship the quantity in the next few months. India's rice exports for MY 2011/12 is forecast at 2.5 million tons, which would include basmati rice, premium non-basmati and some concessional exports to neighboring countries on humanitarian grounds.

Based on preliminary official trade data, India's MY 2009/10 exports are estimated at 1.79 million tons compared to 2.12 million tons last year, mostly to Middle Eastern countries (see Table 7). Exports in CY 2010 through September were significantly lower at 1.37 million tons compared to 1.7 million tons last year during the same period. Industry sources report that basmati rice exports revived strongly in the last quarter of CY 2010, which will take the CY 2010 exports to 1.7 million tons.

Stocks:

Government-held rice stocks on October 1, 2010, were 18.44 million tons, against 15.45 million tons a year ago. Following steady rice procurement in MY 2010/11, rice stocks rose 27.8 million tons on February 1, 2011, compared to 25.7 million tons on February 1, 2010. Government stocks are projected at around 19 million tons on October 1, 2011 (MY 2010/11 ending stocks), nearly three times the governments desired stocks of 7.2 million tons (5.2 million tons buffer and 2.0 million tons Strategic reserve). The rice PS&D table includes both government stocks and estimated privately-held stocks.

Figure 4: Rice Stocks - Actual Vs. Desired Buffer Stocks



Source: The Food Corporation of India

Policy:

The government's production policy for rice is the same as wheat. The GOI, with the support of state governments, has undertaken various rice development schemes like the Special Rice Development Program (SRPP), NFSM, Promotion of Hybrid Rice, etc. The government also undertakes the domestic price support, procurement and distribution program in rice similar to wheat. The GOI has banned futures trading in rice since September 2007.

Concerns about food price inflation prompted the Indian government to impose various restrictions on rice exports over the past 3 years. Currently, exports of basmati rice are allowed subject to a minimum export price (MEP) of \$900 per ton; thus exports of three select varieties of premium non-basmati rice varieties are allowed subject to an MEP of \$800 per ton and an export limit of 150,000 metric tons in the MY 2010/11. Export of all other non-basmati rice exports are banned, except for some exemptions to neighboring countries such as Nepal and Bangladesh.

In March 2008, the GOI removed the import duty on rice which has been periodically extended from time to time, and is currently effective till March 31, 2011. Although there has not been any import of rice, the government is likely to extend the 'zero' import duty regime for another year on price inflation concerns.

Marketing:

Indian high-quality basmati and select premium 'short grain' varieties compete against U.S. rice in several markets, particularly in the European Union, and in the Middle East.

Production, Supply and Demand Data Statistics:

Table 5: Commodity, Rice, Milled, PSD

(Area in thousand hectares and quantity in thousand metric tons)

Rice, Milled India	2009/2010		2010/2011		2011/2012	
	Market Year Begin: Oct 2009		Market Year Begin: Oct 2010		Market Year Begin: Oct 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	41,880	41,850	44,000	43,700		44,500
Beginning Stocks	19,000	19,000	20,500	20,500		21,600
Milled Production	89,130	89,090	95,000	94,500		98,000
Rough Production	133,708	133,648	142,514	141,764		147,015
Milling Rate (.9999)	6,666	6,666	6,666	6,666		6,666
MY Imports	0	0	0	0		0
TY Imports	0	0	0	0		0
TY Imp. from U.S.	0	0	0	0		0
Total Supply	108,130	108,090	115,500	115,000		119,600
MY Exports	2,200	1,790	2,500	2,400		2,500
TY Exports	2,200	1,850	2,500	2,400		2,500
Consumption and Residual	85,430	85,800	95,000	91,000		96,000
Ending Stocks	20,500	20,500	18,000	21,600		21,100
Total Distribution	108,130	108,090	115,500	115,000		119,600

Table 6: Commodity, Rice, Milled, Prices Table

Prices In	Rupees	per uom	metric tons
Year	2009	2010	%Change
Jan	16750	20000	19.4
Feb	16500	19750	19.7
Mar	15750	19750	25.4
Apr	15500	19500	25.8
May	15500	19000	22.6
Jun	15500	19500	25.8
Jul	15500	19000	22.6
Aug	16500	19000	15.2
Sep	16750	18800	12.2
Oct	19500	18750	-3.8
Nov	19750	19000	-3.8

Dec	20000	19750	-1.3
Exchange Rate	45.00	Local Currency/US\$	
Date of Quote	February 23, 2011	MM/DD/YYYY	
Month-end Delhi Wholesale Prices for Common Rice			
Source: Department of Consumer Affairs, GOI			

Table 7: Commodity, Rice, Milled, Export Trade Matrix

Export Trade Matrix			
Country	INDIA		
Commodity	Rice, Milled		
Time Period	Jan-Dec	Units	Tons
Exports for	2009		2010 *
U.S.	33382	U.S.	7518
Others		Others	
Saudi Arabia	606613	Saudi Arabia	458482
UAE	581547	UAE	421316
Iran	418852	Iran	189497
Kuwait	122403	Kuwait	75976
Yemen	59657	Yemen	39328
UK	56834	UK	19311
Sri Lanka	18883	South Africa	13419
Singapore	14542	Sri Lanka	13415
Canada	11657	Mauritius	6768
Qatar	7701	Singapore	4574
Total for Others	1898689		1242086
Others not Listed	191703		115688
Grand Total	2123774		1365292
*January through September 2010 (Preliminary)			
Source: Directorate General of Commercial Intelligence & Statistics, GOI			

Author Defined: COARSE GRAINS

Production

Assuming normal weather conditions, including a normal monsoon this summer, MY 2011/12 coarse grain production is forecast at 40.3 million tons, marginally lower than MY 2010/11 output of 40.4 million tons, and record production of 40.8 million tons in MY 2007/08. The MY 2010/11 production forecast includes a record 21.0 million tons of corn, 11 million tons of millets, 6.8 million tons of sorghum, and 1.5 million tons of barley. However, 2011 monsoon rains will largely determine the area and size of coarse grain production as only 14 percent of the total coarse grain crop is irrigated.

Overall sufficient 2010 monsoon rains supported higher *kharif* (fall and early winter-harvested) coarse grain production, as uneven and sub-optimal rains in eastern India resulted in a higher area shift from the water intensive paddy crop. However, good late season rains and higher support prices for pulses resulted in lower planting of *rabi* season crops (corn, sorghum and

barley). According to the government's preliminary estimates, total coarse grain production in 2010/11 was slightly over 40.0 tons, which includes a record 20.03 million tons corn, which is typically revised marginally higher towards the end. Post's total coarse grain production estimate for MY 2010/11 includes a record corn output of 20.5 million tons on higher area and excellent growing conditions; millet at 11.0 million tons on favorable growing conditions, sorghum at 6.8 million tons on lower area, and barley at 1.35 million tons on lower area.

Corn production in India has shown a generally steady upward trend in recent years with increased coverage under hybrids, which is currently around 45 percent of the total area and expected to grow further. Millet production fluctuates widely from year-to-year depending on the monsoon, as it is almost entirely rain-fed and has not experienced any major productivity enhancing technology breakthrough. Sorghum production has been slowing down due to a shift in area from sorghum to commercial crops such as cotton, soybean, etc. Barley production, which is a small winter crop in north India, has been stagnant between 1.3 to 1.5 million tons over the past several years. Most of the barley production in India is feed-type, six-row varieties, and unsuitable for malting. Despite strong demand from India's growing malt-based beer industry, barley production has remained stagnant because of lower yields and returns vis-à-vis wheat. However, in recent years good malting-type barley varieties have been developed under public-private breeding programs, which are replacing feed barley. Trade sources report that some malting and brewing companies have started contract farming of malting type barley in Rajasthan, Punjab and Haryana.

Consumption

Coarse grain consumption is forecast at around 38 million tons in MY 2010/11, almost 3 million tons higher than the MY 2009/10 level. Food use accounts for a major share of coarse grain consumption, particularly in the case of sorghum, millet, and barley. Coarse cereals are the staple diet of millions of rural poor in India, particularly in the regions where they are grown. With coarse grains known for their richer nutrient and fiber contents, their consumption is picking up amongst the urban population, particularly 'health conscious' and diabetes-prone Indians.

Corn ranks as the third most important food grain crop in India after rice and wheat, because of its wide variety of uses - human food, animal feed and industrial use. About 8.5 million tons of corn (nearly half of total consumption) goes for feed use, primarily for poultry feed; about 1.2 to 1.4 million tons is used by the starch industry and the rest goes for food use. Growth in the poultry industry (approximately 10percent per annum) has fueled corn demand by the feed industry despite prevailing high corn prices. Corn demand by the starch industry, mainly used by the textile industry, has been also on the upswing with the recovery in the global economy.

The high tannin content in Indian sorghum restricts its use in poultry rations, while its use in the production of potable liquor, industrial alcohol and starch is reportedly increasing. Barley is used mainly for food and feed, although some better quality varieties are used in malting (0.5 million tons).

India does not produce any ethanol for fuel purposes from cereal grains. Thus, there has been no impact resulting from the domestic ethanol program (which is based on molasses from sugar) on the domestic market for food, feed and trade of cereal grains and its byproducts.

Prices Firm

Unlike rice and wheat, coarse cereal prices are impacted by global price movements as exports are currently not restricted. Despite higher domestic production, corn prices have remained firm in MY 2010/11 on strong domestic demand and international prices. Average corn prices across the major markets in February 2011 are estimated at Rs. 9,730 (\$216) per metric tons, about 5 percent higher than the average prices in February 2010. However, prices of other coarse grains have eased on higher domestic production compared to last year's drought-affected crop.

Trade

Corn exports in MY 2010/11 are expected to recover to 2.4 million tons on strong international demand. Market sources report that Indian traders have already contracted for about 1.2 million tons of corn through mid-February 2011, of which about 0.8 million tons have already been shipped. Domestic corn prices in the major producing states are currently around Rs. 9500 per metric ton (\$ 210), which works out around \$245 per metric ton FOB. Indian corn is competitive despite being discounted for quality concerns vis-à-vis other origins. India's ability to ship in relatively small quantities is an important selling factor in neighboring and south Asian markets. Assuming global corn prices remain firm and the GOI does not impose any major export restrictions, MY 2010/11 exports are estimated to reach 2.4 million tons compared to 1.8 million tons in MY 2009/10. The provisional official figures of corn exports for the first 10 months of MY 2009/10 (Oct-July) are estimated at 1.67 million tons compared to 2.27 million tons for the comparable period last year. Although corn exports in MY 2011/12 will largely depend on whether Indian corn prices will remain competitive in the international market, Post currently forecasts exports at 2.2 million tons on expected strong domestic demand.

Besides corn, Indian exporters have exported some sorghum, millet and barley in MY 2009/10 following global shortages. Most of the exports of these coarse cereals are to Middle Eastern countries, mainly for feed purposes.

Policy

The GOI production policy for coarse grains is similar to wheat and rice, except that the government's procurement operation for coarse grains is not very effective. Unlike wheat and rice, the government does not typically maintain a buffer stock of coarse grains to keep prices in check. As policy, the GOI does not allow use of food grains, including coarse cereals, for ethanol for fuel purposes (see Grain Report IN1058). Efforts to produce ethanol from other feed stocks like sweet sorghum stalks and crop waste are still at an experimental stage.

India's existing trade policy allows imports of corn under a tariff rate quota (TRQ) of 500,000 metric tons at nil duty. Imports exceeding the TRQ are subject to a 50 percent import duty. There are no restrictions on exports. However, imports of any biotech product, including genetically modified corn and products, are subject to approval by India's biotech regulatory agency, the Genetic Engineering Approval Committee (GEAC). The GEAC has not approved any biotech corn or byproducts for imports.

- In June 2000, the GOI established a TRQ for corn imports, under which up to 500,000 tons of corn can be imported annually, subject to an in-quota tariff of 15 percent; above-quota imports face a 50 percent import duty. In February 2007 the government allowed duty free imports and removed TRQ through December 2007. In April 2008, the in-quota tariff was removed. To import corn under TRQ at zero duty, the importer must obtain a Tariff Rate Quota Allocation Certificate issued by the Directorate General of Foreign Trade (DGFT). The Certificate is issued in accordance with the procedure as may be specified by the EXIM Facilitation Committee from time to time through a public notice.
- In March 2007, the GOI channeled exports of corn through government parastatals for six months. Exports of corn were banned for the period of July 3 to October 25, 2008.
- The Ministry of Commerce and Industry, on April 7, 2006, announced a supplement to the GOI's Foreign Trade Policy (2004-2009), which required all imports containing products resulting from modern biotechnology to receive prior approval via the Genetic Engineering Appraisal Committee (GEAC), as well as mandating a positive declaration stating that the product is "genetically modified." Importers are responsible for providing this declaration, and likewise are liable to punitive action if the declaration is incorrect.
- The TRQ was not utilized in 2010/11 and it is unlikely to see imports under the TRQ in the coming marketing year.

Currently, there are no restrictions on exports of millets, sorghum, and barley, and imports are allowed subject to the effective import duty and phytosanitary conditions specified in the Plant Quarantine (Regulation of Imports into India) Order 2003. The basic import duty on sorghum and millets is 50 percent, and nil in case of barley. All grain imports are restricted on the basis of various phytosanitary issues such as weed seeds and ergot.

Marketing

Although India currently does not import corn, the growth of the poultry and starch industries may eventually create a demand for imported corn.

Table 8: Commodity, Corn, PSD

Corn India	2009/2010		2010/2011		2011/2012	
	Market Year Begin: Nov 2009		Market Year Begin: Nov 2010		Market Year Begin: Nov 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	8,000	8,330	8,500	8,550		8,600
Beginning Stocks	686	686	686	526		626
Production	16,680	16,720	21,000	20,500		21,000
MY Imports	20	20	0	0		0
TY Imports	20	20	0	0		0
TY Imp. from U.S.	0	0	0	0		0
Total Supply	17,386	17,426	21,686	21,026		21,626
MY Exports	1,700	1,800	2,500	2,400		2,200
TY Exports	1,700	1,750	2,500	2,400		2,200
Feed and Residual	7,000	7,400	8,500	8,500		9,200
FSI Consumption	8,000	7,750	9,800	9,500		9,500
Total Consumption	15,000	15,150	18,300	18,000		18,700
Ending Stocks	686	526	886	626		726
Total Distribution	17,386	17,476	21,686	21,026		21,626

Table 9: Commodity, Sorghum, PSD

Sorghum India	2009/2010		2010/2011		2011/2012	
	Market Year Begin: Nov 2009		Market Year Begin: Nov 2010		Market Year Begin: Nov 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	7,000	7,500	7,500	7,200		7,200
Beginning Stocks	181	181	186	156		206
Production	6,980	6,700	7,500	6,800		6,800
MY Imports	0	0	0	0		0

TY Imports	0	0	0	0		0
TY Imp. from U.S.	0	0	0	0		0
Total Supply	7,161	6,881	7,686	6,956		7,006
MY Exports	75	125	50	50		50
TY Exports	75	125	50	50		50
Feed and Residual	1,400	1,300	1,500	1,300		1,300
FSI Consumption	5,500	5,300	6,000	5,400		5,500
Total Consumption	6,900	6,600	7,500	6,700		6,800
Ending Stocks	186	156	136	206		156
Total Distribution	7,161	6,881	7,686	6,956		7,006

Table 10: Commodity, Millet, PSD

Millet India	2009/2010		2010/2011		2011/2012	
	Market Year Begin: Nov 2009		Market Year Begin: Nov 2010		Market Year Begin: Nov 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	9,000	10,400	10,500	10,600		10,000
Beginning Stocks	320	320	230	275		525
Production	8,810	8,780	11,800	11,700		11,000
MY Imports	0	0	0	0		0
TY Imports	0	0	0	0		0
TY Imp. from U.S.	0	0	0	0		0
Total Supply	9,130	9,100	12,030	11,975		11,525
MY Exports	0	125	0	150		100
TY Exports	0	125	0	150		100
Feed and Residual	700	700	800	800		800
FSI Consumption	8,200	8,000	10,900	10,500		10,300
Total Consumption	8,900	8,700	11,700	11,300		11,100
Ending Stocks	230	275	330	525		325
Total Distribution	9,130	9,100	12,030	11,975		11,525

Table 11: Commodity, Barley, PSD

Barley India	2009/2010		2010/2011		2011/2012	
	Market Year Begin: Apr 2009		Market Year Begin: Apr 2010		Market Year Begin: Apr 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	780	780	790	740		750
Beginning Stocks	67	67	157	206		186
Production	1,690	1,690	1,300	1,350		1,500
MY Imports	0	0	0	0		0

TY Imports	0	0	0	0		0
TY Imp. from U.S.	0	0	0	0		0
Total Supply	1,757	1,757	1,457	1,556		1,686
MY Exports	150	51	100	20		50
TY Exports	150	51	100	20		50
Feed and Residual	250	300	100	150		150
FSI Consumption	1,200	1,200	1,150	1,200		1,250
Total Consumption	1,450	1,500	1,250	1,350		1,400
Ending Stocks	157	206	107	186		236
Total Distribution	1,757	1,757	1,457	1,556		1,686

PULSES

Production

India is the world's largest producer, consumer and importer of pulses. India's MY 2011/12 (Apr/Mar) pulse production is forecast at a record 16.8 million tons, more than 12 percent higher than the drought-impacted MY 2010/11 production of 14.7 million tons. The government's step to raise the MSP of pulses significantly, compared to cereal crops, coupled with good market prices, a good 2010 monsoon and late season rains encouraged farmers to bring more area under pulses. The *kharif* season pulse production (mostly pigeon peas, mung beans, and black matpe) is tentatively estimated by the government at a record 6.45 million tons compared to 4.2 million tons in 2009/10 and a record 6.4 million tons in MY 2007/08. Preliminary official planting data reports that area planted to *rabi* pulses, which include mostly chickpeas, lentils, and peas, is estimated 14.9 million hectares, nearly 1.1 million hectares more than last year. However, there have been some reports of crop damage due to late season rains and severe frost in December/January. Nevertheless, *rabi* pulses production should touch 10.3 million tons, compared with 10.46 million tons last year.

India is the world's largest producer of pulses due to India's strong preference for vegetarian protein sources. Pulses are grown both in the *kharif* and *rabi* seasons, with almost two-thirds produced in the latter. Most pulses are grown under non-irrigated conditions (85 percent), and depend largely on monsoon and winter rains for growth and productivity. Limited varietal improvements and low resilience to soil moisture stress and pest infestation have contributed to low yields. Madhya Pradesh, Uttar Pradesh, Maharashtra, Andhra Pradesh, and Karnataka together account for over 70 percent of the country's total pulse production, with Madhya Pradesh alone contributing around 24 percent. Pulse production has failed to respond to the steady increase in both support prices and open market prices over the past two decades, due to competition from more profitable and less risky crops such as wheat and rice. Pulse production has also not been as attractive to farmers due to a lack of adequate government support for improved production technology and a poor procurement policy vis-à-vis wheat and rice.

Consumption

Pulse consumption in MY 2011/12 is forecast higher at 18.5 million tons on record domestic production, sufficient carryover stocks of imported pulses with government parastatals, and continued strong imports. Consumption in MY 2010/11 is estimated 17.5 million tons, including 3.5 million tons of imported pulses. Good 2010/11 *rabi* pulse production, coupled with strong imports of pulses in MY 2009/10 and 2010/11, particularly cheaper-priced yellow peas, resulted in the price of pulses easing around the middle of CY 2010 after reaching record levels. Government efforts to import subsidized pulses and distribute the same through the PDS system also helped bringing down the prices.

Pulses are an important constituent of the diets of the predominantly vegetarian Indian population. India's per-capita consumption of pulses has been shrinking in the last few decades as domestic production had been lagging behind the consumption, necessitating larger imports. Due to the increasing demand and purchasing power of Indian consumers, market prices of pulses in the last few years have been relatively high compared to other food groups (cereals, vegetable oil, vegetable, fruits etc) despite increasing import volumes.

Stagnating domestic production and rising domestic prices have forced the government to actively encourage imports of pulses from the global market to augment domestic supplies. However, the global availability of pulses preferred by the Indian consumers, such as pigeon peas, mung beans, black matpe, etc, is limited to a few neighboring suppliers like Myanmar. High prices of traditional pulses have forced Indian consumers to shift to imported yellow peas as a low cost substitute for higher priced pulses like pigeon peas and chick peas. Yellow pea consumption is also being promoted by the government through a media campaign to popularize yellow peas *dal* (split pulses) as a pulse with 'high nutritive value.' In the last few years, government agencies have imported large quantities of yellow peas, which are being made available through various government distribution networks at a subsidized price (Rs. 26/kg).

Domestic Price Fluctuate on Global Price Movements

Prices of pulses in MY 2009/10 soared to high levels on lower domestic production and high global prices. Domestic prices have eased significantly since the beginning of MY 2010/11 on high opening stocks, improved domestic production and lower global prices. Market sources report that pulse prices have started firming up again since January on strong global prices, but may ease after the arrival of *rabi* harvest. However, future price movement will depend on global prices as imports account for a significant share (20-25 percent) of total market.

Trade

India's pulse imports in MY 2009/10 are estimated at a record 3.75 million tons due to very high domestic prices. Pulse imports in MY 2010/11 are estimated somewhat lower at 3.5 million tons on improved domestic supplies and lower domestic prices. Preliminary official trade data for the first six months of MY 2010/11 point to imports of 1.2 million tons compared to 1.3 million tons during the same period last year. Imports are forecast to remain strong in MY 2010/11 provided international prices remain stable.

According to official data, MY 2009/10 imports included 1.7 million tons of dry peas, 706,000 tons of mung beans, 338,000 tons of chickpeas (garbanzo) beans, 325,000 tons of kidney and other beans, 288,000 tons of lentils, and 437,000 tons of others (mostly pigeon peas). Major suppliers were Canada, Australia, the United States, and Ukraine. India is a price buyer of pulses, with some resistance to high international prices. Green peas, yellow peas and lentils from the United States (which are typically higher-priced) have become more price competitive in the Indian market in recent years due to high prices emerging among the top five exporters to India. Imports of pulses from the United States, mostly dry green peas and some yellow peas, lentils and garbanzo beans, have grown strongly in the last five years reaching a record level of 224,250 metric tons in CY 2009, which declined marginally to 215,560 million tons in CY 2010, making India the largest export market for U.S. pulses.

Policy

Historically, the government's food grain production programs have mainly focused on rice and wheat, with limited investment in pulses. Stagnating domestic production, rising imports and escalating domestic prices have forced the

government to focus on enhancing domestic production of pulses. Pulses were included in the government's National Food Security Mission, which aims to increase pulse production by 2 million tons by 2011/12 through the supply of quality seeds and better agronomic practices. Recently, the government raised the minimum support price of pulses this year by 15 to 30 percent over last year, while prices of most cereals were raised marginally or unchanged. Since 2009 the GOI also supplies one kilogram of pulses per month per family through the PDS at a subsidy of Rs. 10 per kilogram. However, the GOI wants to supply the cheaper yellow peas, while many state governments are reluctant to supply yellow peas and want traditional pulses such as pigeon peas, black matpe, and mung beans under this program.

In a move to contain the rising prices of pulses in the domestic market, the Indian government exempted pulses from the applicable 10 percent import duty in June, 2006 through March 31, 2009. This exemption has been periodically extended and is currently applicable till March 31, 2011. At the same time, the GOI also imposed a ban on the export of pulses, with the exception of garbanzos (*kabuli chana*), which has been periodically extended and is currently applicable till March 31, 2011. The GOI has authorized government agencies/trading companies such as NAFED, STC, PEC, and MMTC to import pulses for sale in the domestic market, and these agencies would qualify for a subsidy of up to 15 percent of the cost of import. The government is expected to extend the current export bans, imports at zero duty and subsidized imports by government agencies for at least another year, i.e., until March 31, 2012.

Effective January 1, 2004, pulse (chickpeas, peas) imports from all origins to India were subject to fumigation by methyl bromide at the port of loading apparently to protect domestic production from stem and bulb nematode, pea cyst nematode, and bruchids, per the Plant Quarantine Regulation of Import into India Order, 2003. As methyl bromide is being phased out due to environmental concerns in most countries, it is increasingly difficult and costly to fumigate pulses with methyl bromide at the port of origin in many countries. However, the GOI has allowed fumigation by methyl bromide at the port of arrival in India on an ad hoc basis. Unless the fumigation requirement is modified, pulse exports to India could be in jeopardy, which could further exacerbate the Indian pulse supply situation leading to a rise in domestic pulse prices. Recently, the GOI extended the methyl bromide fumigation on arrival arrangement for pulses coming from Canada and the United States up to September 30, 2011.

The Indian government has also disallowed futures trading in tur (pigeon pea) and urad (mung beans) until further notice under the assumption that futures contract trading is responsible for the high prices of pulses. Several state governments have imposed stocks limits on pulses held by the private trade to control the price rise.

Marketing

Keys to improving the U.S. position in the Indian pulse market include expanding the supply of peas and chickpeas and making it more price competitive, as India is likely to remain a significant market for pulses in the coming years. "Price buyers" of pulses are unwilling to pay a significant premium for higher U.S. quality, especially if lower-cost pulses are plentiful from other countries. Most U.S. type beans (navy beans, black beans, pintos, and lima beans) are relatively unknown in India.

The GOI is encouraging Indian farmers and Indian corporate players to explore opportunities to produce pulses overseas, either through contract farming or by purchasing/leasing land. The GOI is working with several African and South American countries to create policies which will enable this type of activity.

